**WHAT IS CLAIMED IS:**

1. An angle detecting apparatus comprising: one or more line-type passive range-finding devices for performing a range-finding operation, each line-type passive range-finding device having a pair of lenses spaced apart from each other by a baseline length, a line sensor disposed behind the lenses so that a pair of images of an object are focused by the respective lenses onto the line sensor, and an operating section for performing the range-finding operation in a plurality of mutually different directions on the basis of an output of the line sensor; and an inclination-angle computing section for computing an inclination angle of the object relative to a direction of the baseline length on the basis of an output of the line-type passive range-finding device.

2. An angle detecting apparatus according to claim 1; wherein the output of each line-type passive range-finding device is a distance from the lenses to the object in each of the different directions.

3. An angle detecting apparatus according to claim 1; wherein the one or more line-type passive range-finding devices comprise a plurality of line-type passive range-finding devices for performing range-finding operations in different directions.

4. An angle detecting apparatus according to claim 1; wherein the one or more line-type passive range-finding devices comprise a first line-type passive range-finding device having a first baseline length direction and a second line-type passive range-finding device having a second baseline length direction perpendicular to the first baseline length direction.

5. An angle detecting apparatus according to claim 1; wherein the one or more line-type passive range-finding devices are disposed in a housing of an image projection device; and the object is a screen or wall onto which an image is projected by the projection device, so that the angle detecting apparatus detects a relative angle of inclination between the projection device and the screen or wall.

6. An angle detecting apparatus according to claim 1; wherein the inclination-angle computing section computes an inclination angle of the object relative to the baseline length direction in each of the different directions on the basis of an angle relative to a line perpendicular to the baseline length direction and the output of the line-type passive range-finding device.

7. An angle detecting apparatus according to claim 1; wherein the inclination-angle computing section computes an inclination angle of the object relative to the baseline length direction in each of the different directions on the basis of a

contrast center-of-gravity position of each of the images on the line sensor and the output of the line-type passive range-finding device.

8. An angle detecting apparatus according to claim 1; wherein the line sensor has a plurality of light-receiving regions including at least a first light-receiving region on which one of the pair of images of the object is focused and a second light-receiving region on which the other of the pair of images of the object is focused, the first and second light-receiving regions comprising a plurality of range-finding operating regions corresponding to the plurality of range-finding directions; the operating section performs range-finding operations in the plurality of range-finding directions on the basis of outputs of the line sensor in the first and second light-receiving regions; and the inclination-angle computing section computes an inclination angle of the object relative to the baseline length direction on the basis of outputs of the line sensor in two different range-finding directions based on the output of the line-type passive range-finding device in the plurality of range-finding directions and a value dependent upon a distance of between two of the range-finding operating regions in the first light-receiving region corresponding to the two range-finding directions.

9. An angle detecting apparatus according to claim 8; wherein the value dependent upon a distance between two of the range-finding operating regions in the first light-receiving region is a distance of center positions in the baseline length direction in each of the two range-finding operating regions.

10. An angle detecting apparatus according to claim 8; wherein the value dependent upon a distance of between two of the range-finding operating regions in the first light-receiving region is a distance of contrast center-of-gravity positions of images respectively focused in the two range-finding operating regions.

11. An angle detecting apparatus according to claim 1; wherein the object is a screen onto which an image is projected.

12. A projector for projecting an image formed in accordance with an input video signal onto a screen, comprising an angle detecting apparatus according to claim 11 and an image-distortion correcting section for correcting distortion in the projected image on the basis of an inclination angle computed by the angle detecting apparatus.

13. A projector according to claim 12; wherein the angle detecting apparatus intermittently computes an inclination angle of the screen relative to the baseline length direction, and the image-distortion correcting section corrects distortion

in the projected image on the basis of the intermittently computed inclination angle.

14. A projector comprising: an image generating section for generating an image to be projected and outputting display data; a display section having a projection optical system including a condensing lens and a display driving section for receiving the display data and driving the projection optical system to project the image onto a surface based on the display data; a pair of lenses spaced apart from each other by a baseline length; a sensor disposed behind each lens onto which images of the surface are focused; an operating section for performing a range-finding operation in a plurality of mutually different directions on the basis of outputs of the sensors; and a control circuit for computing an inclination angle of the surface relative to a direction of the baseline length on the basis of outputs of the sensors and controlling one of the image generating section and the projection optical system on the basis of the inclination angle to correct for keystone distortion in the projected image.

15. A projector according to claim 14; wherein the sensors comprise adjacent segments of a line sensor.

16. A projector according to claim 14; wherein the lenses, the sensors, and the operating section are comprised of lenses, a line sensor, and an operating section of a first line-type passive range-finding device.

17. A projector according to claim 17; further comprising a second line-type passive range-finding device oriented perpendicularly with respect to the first line-type passive range-finding device; wherein the control circuit computes inclination angles based on outputs of the first and second line-type passive range-finding devices.

18. A projector according to claim 14; wherein the control circuit computes the inclination angle on the basis of an angle relative to a line perpendicular to the baseline length direction and outputs of the sensors.

19. A projector according to claim 14; wherein the control circuit computes the inclination angle on the basis of a contrast center-of-gravity position of each of the images on the sensors and outputs of the sensors.

20. A projector comprising: an image generating section for generating an image to be projected and outputting display data; a display section having a projection optical system including a condensing lens and a display driving section for receiving the display data and driving the projection optical system to project the image onto a surface based on the display data; one or more line-type passive range-finding devices for performing a range-finding operation each having a pair of lenses spaced apart from each other by a baseline length, a line sensor disposed behind the lenses so that a pair of images of the

surface are focused by the respective lenses onto the line sensor, and an operating section for performing the range-finding operation in a plurality of mutually different directions on the basis of an output of the line sensor; and a control circuit for computing an inclination angle of the surface relative to a direction of the baseline length on the basis of an output of the line-type passive range-finding device, and controlling one of the image generating section and the projection optical system on the basis of the inclination angle to correct for keystone distortion in the projected image.